Claims;

Sub B1

1. A method for immunoassay with magnetized label and SQUID, which comprising following processes;

(1) an analyte is labeled with a magnetic label to detect antigen-antibody reaction,

(2) the magnetic material label is magnetized by a magnetic field,

(3) the magnetized magnetic material label detected by a SQUID which detect a magnetic field having right angle to the magnetic field.

2. A method mentioned in claim 1, said magnetic field for magnetization is a static magnetic field.

3. A method mentioned in claim 1, said SQUID detects variation of the magnetic field occurred by moving the analyte labeled by magnetized magnetic material .

4. A method mentioned in claim 1, the analyte moves parallel to the magnetic field for magnetization.

5. An apparatus for immunoassay with magnetized label and SQUID, which comprising; a magnetic field generation means which generate a magnetic field to magnetize an analyte labeled by antigen-antibody reaction with magnetic material label, a SQUID which detects a magnetic field having right angle to the magnetic field generated by the magnetic generation means.

6. An apparatus mentioned in claim 5, the magnetic field generated by the generation means is a static magnetic field.

7. An apparatus mentioned in claim 5, which comprises a means conveying the analyte to pass trough the detection field of the SQUID.

8. An apparatus mentioned in claim 7, the analyte moves parallel to the first magnetic field.

9. An apparatus mentioned in claim 5, the magnetic field generation means generates second magnetic field which cancels component of the first magnetic field that is parallel to detecting direction of SQUID.

10. An apparatus mentioned in claim 5, the analyte is treated by a support which is sufficiently wide to the detection field of the SQUID.

11. An apparatus mentioned in claim 5, the SQUID is formed of an oxide superconducting thin film.

Add B2